



Kromasil

	Kromasil 100
Phases	C8 and C18
Particle Sizes	3.5 and 5µm
Pore Size	110Å
Pore Volume	0.9mL/gm
Surface Area	330m ² /gm
%Carbon (w/w)	C8 = 12%, C18 = 20%
Silica Class	Type B
Hardware	Stainless steel and PEEK columns and cartridges

The only commercially available sorbent offered in our product family, Kromasil has become well known for its unique selectivity, robust mechanical and chemical structure, and wide use in pharmaceutical process scale facilities. Higgins Analytical's ability to manufacture Kromasil HPLC columns that have unrivaled performance has made us an economically competitive and routine supplier of very high quality Kromasil columns to laboratories and OEM customers on five continents.

Capillary Columns

Kromasil 100 C8 5µm	0.15mm I.D.	
30x0.15mm	50x0.15mm	100x0.15mm
KC-0315-C085	KC-0515-C085	KC-1015-C085

Kromasil 100 C18 3.5µm	0.15mm I.D.	
30x0.15mm	50x0.15mm	100x0.15mm
KC-0315-C183	KC-0515-C183	KC-1015-C183

Kromasil 100 C18 5µm	0.15mm I.D.	
30x0.15mm	50x0.15mm	100x0.15mm
KC-0315-C185	KC-0515-C185	KC-1015-C185

Microbore Columns

Kromasil 100 C8 5µm	1.0mm - 0.5mm - 0.3mm I.D.			
30x1.0mm	50x1.0mm	100x1.0mm	150x1.0mm	250x1.0mm
KS-0301-C085	KS-0501-C085	KS-1001-C085	KS-1501-C085	KS-2501-C085
30x0.5mm	50x0.5mm	100x0.5mm	150x0.5mm	
KS-03M5-C085	KS-05M5-C085	KS-10M5-C085	KS-15M5-C085	
30x0.3mm	50x0.3mm	100x0.3mm		
KS-03M3-C085	KS-05M3-C085	KS-10M3-C085		

Kromasil 100 C18 3.5µm	1.0mm - 0.5mm - 0.3mm I.D.			
30x1.0mm	50x1.0mm	100x1.0mm	150x1.0mm	250x1.0mm
KS-0301-C183	KS-0501-C183	KS-1001-C183	KS-1501-C183	KS-2501-C183
30x0.5mm	50x0.5mm	100x0.5mm	150x0.5mm	
KS-03M5-C183	KS-05M5-C183	KS-10M5-C183	KS-15M5-C183	
30x0.3mm	50x0.3mm	100x0.3mm		
KS-03M3-C183	KS-05M3-C183	KS-10M3-C183		

Kromasil 100 C18 5µm	1.0mm - 0.5mm - 0.3mm I.D.			
30x1.0mm	50x1.0mm	100x1.0mm	150x1.0mm	250x1.0mm
KS-0301-C185	KS-0501-C185 \$290	KS-1001-C185 \$300	KS-1501-C185 \$325	KS-2501-C185
30x0.5mm	50x0.5mm	100x0.5mm	150x0.5mm	
KS-03M5-C185	KS-05M5-C185 \$290	KS-10M5-C185 \$300	KS-15M5-C185 \$325	
30x0.3mm	50x0.3mm	100x0.3mm		



NEW!

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Analytical Columns - Stainless Steel

Kromasil 100 C8 5µm 4.6, 3.0, and 2.1mm I.D. s.s. Analytical Columns				
30x4.6mm KS-0346-C085	50x4.6mm KS-0546-C085	100x4.6mm KS-1046-C085	150x4.6mm KS-1546-C085	250x4.6mm KS-2546-C085
30x3.0mm KS-0330-C085	50x3.0mm KS-0530-C085	100x3.0mm KS-1030-C085	150x3.0mm KS-1530-C085	250x3.0mm KS-2530-C085
30x2.1mm KS-0321-C085	50x2.1mm KS-0521-C085	100x2.1mm KS-1021-C085	150x2.1mm KS-1521-C085	250x2.1mm KS-2521-C085

Kromasil 100 C18 3.5µm 4.6, 3.0, and 2.1mm I.D. s.s. Analytical Columns				
30x4.6mm KS-0346-C183	50x4.6mm KS-0546-C183	100x4.6mm KS-1046-C183	150x4.6mm KS-1546-C183	250x4.6mm KS-2546-C183
30x3.0mm KS-0330-C183	50x3.0mm KS-0530-C183	100x3.0mm KS-1030-C183	150x3.0mm KS-1530-C183	250x3.0mm KS-2530-C183
30x2.1mm KS-0321-C183	50x2.1mm KS-0521-C183	100x2.1mm KS-1021-C183	150x2.1mm KS-1521-C183	250x2.1mm KS-2521-C183

Kromasil 100 C18 5µm 4.6, 3.0, and 2.1mm I.D. s.s. Analytical Columns				
30x4.6mm KS-0346-C185	50x4.6mm KS-0546-C185	100x4.6mm KS-1046-C185	150x4.6mm KS-1546-C185	250x4.6mm KS-2546-C185
30x3.0mm KS-0330-C185	50x3.0mm KS-0530-C185	100x3.0mm KS-1030-C185	150x3.0mm KS-1530-C185	250x3.0mm KS-2530-C185
30x2.1mm KS-0321-C185	50x2.1mm KS-0521-C185	100x2.1mm KS-1021-C185	150x2.1mm KS-1521-C185	250x2.1mm KS-2521-C185

Semi-Prep and Prep Columns

Kromasil 100 C8 5µm 10mm and 20mm I.D. Stainless Steel Semi-Prep and Prep Columns				
50x10mm KS-0510-C085	100x10mm KS-1010-C085	150x10mm KS-1510-C085	250x10mm KS-2510-C085	
50x20mm KS-0520-C085	100x20mm KS-1020-C085	150x20mm KS-1520-C085	250x20mm KS-2520-C085	

Kromasil 100 C18 5µm 10mm and 20mm I.D. Stainless Steel Semi-Prep and Prep Columns				
50x10mm KS-0510-C185	100x10mm KS-1010-C185	150x10mm KS-1510-C185	250x10mm KS-2510-C185	\$500
50x20mm KS-0520-C185	100x20mm KS-1020-C185	150x20mm KS-1520-C185	250x20mm KS-2520-C185	\$1200

HAISpeed10 - 10mm I.D. Stainless Steel Cartridge Columns

Kromasil 100 C8 5µm 10mm I.D. s.s. HAISpeed Cartridges					
30x10mm KF-0310-C085	1/pkg	50x10mm KF-0510-C085	1/pkg	100x10mm KF-1010-C085	1/pkg

Kromasil 100 C18 5µm 10mm I.D. s.s. HAISpeed Cartridges					
30x10mm	1/pkg	50x10mm	1/pkg	100x10mm	1/pkg



HAICART - Stainless Steel Analytical Cartridge Columns

Kromasil 100 C8 5µm 4.6 and 3.2mm I.D. s.s. Analytical Cartridges					
40x4.6mm KF-0446-C085	2/pkg	50x4.6mm KF-0546-C085	2/pkg	100x4.6mm KF-1046-C085	1/pkg
40x3.2mm KF-0432-C085	2/pkg	50x3.2mm KF-0532-C085	2/pkg	100x3.2mm KF-1032-C085	1/pkg

Kromasil 100 C18 3.5µm 4.6 and 3.2mm I.D. s.s. Analytical Cartridges					
40x4.6mm KF-0446-C183	2/pkg	50x4.6mm KF-0546-C183	2/pkg	100x4.6mm KF-1046-C183	1/pkg
40x3.2mm KF-0432-C183	2/pkg	50x3.2mm KF-0532-C183	2/pkg	100x3.2mm KF-1032-C183	1/pkg

Kromasil 100 C18 5µm 4.6 and 3.2mm I.D. s.s. Analytical Cartridges					
40x4.6mm KF-0446-C185	2/pkg	50x4.6mm KF-0546-C185	2/pkg	100x4.6mm KF-1046-C185	1/pkg
40x3.2mm KF-0432-C185	2/pkg	50x3.2mm KF-0532-C185	2/pkg	100x3.2mm KF-1032-C185	1/pkg



HAIPEEK - PEEK Analytical Cartridge Columns

Kromasil 100 C8 5µm 2.1mm I.D. PEEK Analytical Cartridges			
40x2.1mm KK-0421-C085	2/pkg	50x2.1mm KK-0521-C085	2/pkg

Kromasil 100 C18 5µm 2.1mm I.D. PEEK Analytical Cartridges			
40x2.1mm KK-0421-C185	2/pkg	50x2.1mm KK-0521-C185	2/pkg



HAICART Guard Cartridges - 3.2mm I.D. Stainless Steel

Kromasil 100 C8 5µm S.S. Guard Cartridges	
20x3.2mm K108	5/pkg

Kromasil 100 C18 5µm S.S. Guard Cartridges	
20x3.2mm K118	5/pkg



HAIPEEK Guard Cartridges - 2.1mm I.D. PEEK

Kromasil 100 C8 5µm PEEK Guard Cartridges	
20x2.1mm KK-0221-C085	5/pkg

Kromasil 100 C18 5µm PEEK Guard Cartridges	
20x2.1mm KK-0221-C185	5/pkg



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NEW!

We Violate the 80:20 Rule

This catalog contains hundreds of parts and it would probably be no surprise to you if we pointed out that only about 20% of them are manufactured 80% of the time. But what you would not know is that another 20% of the products we manufacture are not even listed in this catalog!

We stock tubing with a wide variety of internal diameters, and since we machine the columns and cartridges ourselves, custom length and I.D. columns are almost as easy for us to provide as are the standard sizes listed in this catalog. Since our part numbering system has an easy to understand pattern, customers routinely compose and order custom configurations.

Easy to Understand Part Numbers

Except for HAICART Guard Cartridges, all Higgins Analytical HPLC column product part numbers are based on a 2-4-4 character pattern. While we will not manufacture every combination and permutation devisable with this scheme, this page will serve as a guide to assist you in defining a product that you believe would better address your needs than one of the hundreds of formats we routinely manufacture.

The two character prefix indicates *sorbent and hardware type*. Standard configurations are **highlighted**.

Prefix Character 1 (Sorbent)

X-XXXX-XXXX
C = CLIPEUS
H = HAISIL 100 or HAISIL 300
K = Kromasil
L = HAISIL HL
T = TARGA

Prefix Character 2 (Hardware)

X■-XXXX-XXXX
S = Stainless steel HPLC Column
P = PEEK HPLC column
F = Stainless steel cartridge column
K = PEEK cartridge column
N = Nano Scale column (150µm)

The four center characters indicate the column or cartridge *length (cm) and internal diameter (mm)*.

Center Characters 1 and 2 (Length)

XX-■■XX-XXX
03 = 3cm **04** = 4cm
05 = 5cm **07** = 7.5cm
10 = 10cm **12** = 12.5cm
15 = 15cm **20** = 20cm
22 = 22cm **25** = 25cm
30 = 30cm **50** = 50cm

Center Characters 3 and 4 (I.D.)

XX-XX■-XXXX
15 = 150µm **M3** = 300µm
M5 = 500µm **M8** = 800µm
01 = 1.0mm **21** = 2.1mm
30 = 3.0mm **32** = 3.2mm
40 = 4.0mm **46** = 4.6mm
10 = 10mm **20** = 20mm

The four character suffix indicates *sorbent chemistry and particle size*.

Suffix Characters 1 to 3 (Phase)

XX-XXXX-■-■-■X
C04 = Butyl or C4
C08 = Octyl or C8
C18 = ODS or C18
CNP = Cyano or Nitrile
M08 = HAISIL 100 C8
M18 = HAISIL 100 C18
NH2 = Amino
PHN = Phenyl
SIL = Silica Gel
W04 = 300Å C4
W08 = 300Å C8
W18 = 300Å C18

Suffix Character 4 (Particle Size)

XX-XXXX-XXX■
1 = 10µm
2 = 10 - 15µm
3 = 3 or 3.5µm
5 = 4.5 or 5µm
7 = 15 - 20µm

Custom HPLC Columns

Let us or The Nest Group, Inc. know if you have particular needs or are interested in formats or chemistries not listed in this catalog. Higgins Analytical is continuously developing new products and would be interested in discussing your individual requirements.

We are also able to pack your own sorbents into analytical or semiprep columns enabling you to conduct selectivity tests and separation optimization work before you commit your sample to very large scale columns packed with the same material.

Higgins is grateful to the following individuals for permission to share their data in this catalog:

Jane Cooper, Lilly Research, Erl Wood Manor, Windlesham, Surrey UK
In Vivo Microdialysis Samples from Rat Hypothalamus. Page 27

Larry David, Oregon Health Sciences University, School of Dentistry, Portland, OR
Human Ocular Lens Protein (Beta A1 Crystallin and Gamma S Crystallin) Analysis by LC/MS. Page 29

Chris Gong and Chulani Karunatilake, Genentech, Inc., South San Francisco, CA
Fast Peptide map of rhGH on a 5cm column. Page 17

Elizabeth Harris, Emisphere Technologies, Inc., Hawthorne, NY
Fast Analysis a Drug Delivery System. Page 17

David Hawke, Perseptive Biosystems, Western Technical Center, South San Francisco, CA
Fast Tryptic Map of Cytochrome-C. Page 17

Ted Holman, University of California, Santa Cruz, CA
Large Competitive Kinetic Isotope Effects in Human 15-Lipoxygenase Catalysis Measured by a Novel HPLC Method. Page 11

David Isom, Analytical Sales and Service, Pompton Plains, NJ
Fat-Soluble Vitamin Assay. Page 27
Antibacterials. Page 27
Antihypertensives. Page 29

Krishna Kalghatgi, NeoGenesis, Cambridge, MA
RPC of Basic Compounds in Combinatorial Mixtures. Page 23

Kamlesh Patel, University of North Carolina, Department of Chemistry, Charlottesville, VA
Analysis of Basic Peptides and Peptide Mapping without TFA. Page 27

Mark Ross, Argonex, Inc., Charlottesville, VA
Micropreparative Chromatography and Reanalysis of Peptides from Tumor Cells. Page 17

Steve Sharp, Roche Products, Welwyn Garden City, UK
LC/MS of Serum Samples. Page 23

Lorne Vandermark, Pharmco, Titusville, FL
Analysis of Cat's Claw Extract. Page 11

Expert and Responsive Technical Support

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HIGGINS ANALYTICAL PRODUCTS ARE MANUFACTURED FOR USE IN RESEARCH IN CHEMICAL MANUFACTURING LABORATORIES ONLY AND ARE NOT INTENDED FOR USE IN CLINICAL OR DIAGNOSTIC APPLICATIONS. THE HAISPEED 10 AND HAISPEED 20 CARTRIDGE HOLDERS ARE RATED FOR USE UP TO 3,000 PSI (200BAR) WITH FLUIDS THAT ARE LIQUID AT STP (STANDARD TEMPERATURE AND PRESSURE) ONLY. SERIOUS BODILY INJURY OR DEATH MAY RESULT IF A HAISPEED HOLDER BROKE WHILE WORKING WITH SUPERCRITICAL FLUIDS.

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